

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Canceled)
2. (Currently Amended) The method of claim ~~1 wherein~~ 14, further comprising the steps of:  
calculating a scheduling number ( $S_i$ ) based on earlier schedulings ~~is calculated~~ for each ~~and all~~ of the users before each new scheduling; and  
~~that~~ creating a relationship ( $r$ ) between the weight ( $W_i$ ) and the scheduling number ( $S_i$ ) ~~is created, which, said~~ relationship [[is]] being decisive of which user is to be scheduled.
3. (Currently Amended) The method of claim 2 wherein the relationship is the ratio, ~~the r ratio,~~ ( $W_i/S_i$ ) between the weight and the scheduling number,  ~~$r = W_i/S_i$ .~~
- 4-5. (Canceled)
6. (Currently Amended) The method of ~~anyone of claims 2-5~~ claim 2, wherein the scheduling number for a user is increased by 1 as soon as the user has been scheduled.
- 7-8. (Canceled)

9. (Currently Amended) A system for performing scheduling of a number of users sharing the same communication channels in a packet-switched radio communication system during a scheduling session, ~~characterised by~~ said system comprising:

means for calculating a scheduling number (S) for each user dependent on earlier schedulings for ~~this the user~~ and other users[[.]]; ~~and~~

means for calculating the a weight (Wi) for associated with a Quality of Service assigned to the each user, and comprising further; and

means for taking into account the moments when the different users enters or leaves entering or leaving the scheduling session, which system ensures in order to ensure a fair distribution of radio resources among the different users according to their assigned weights independent of the entering moment when each user enters the scheduling session.

10. (Currently Amended) The system of claim 9 wherein each user ~~(TBEi)~~ has a reservation on a PSET comprising of a number of packet-switched channels.

11. (Currently Amended) The system of claim 9 wherein the ~~initial~~ scheduling ~~(S)~~ number (S) is initially set to a value of 1 for users participating in the session from the start, while later users entering the session later get either 1 or  
 $W_i \sum S_i / ((\sum W_i) - W_i)$ , whichever is larger, as their initial value ~~whichever value is maximum~~ scheduling number, where

$W_i$  is the weight assigned to the user,

$\sum W_i$  is the sum of weights for all users, and

$\sum S_i$  is the sum of scheduling numbers for earlier users.

12-13. (Canceled)

14. (New) A method of scheduling radio resources for a user in a plurality of users in a telecommunication packet-switched system, each of the users having an associated Quality of Service (QoS), said method comprising:

allocating a weight ( $W_i$ ) in the scheduling process to the user based on the user's associated QoS;

observing the user's dynamic behavior; and

scheduling radio resources for the user based on the following parameters:

the allocated weight ( $W_i$ ) of the user compared to the weights of other users;

earlier schedulings of radio resources; and

the dynamic behavior of the user.

15. (New) The method of claim 14, further comprising the steps of:

establishing a Temporary Block Flow (TBF) for data to be sent by each user;

dividing the TBF into radio blocks; and

sending one radio block over the radio interface when the user is scheduled.

16. (New) The method of claim 2, wherein the step of calculating a scheduling number includes the steps of:

when the scheduling process begins, assigning each user being scheduled, a scheduling number with a starting value of 1; and

for new users entering the scheduling process once it has started, calculating the scheduling number as a function of earlier scheduling numbers ( $S_i$ ) and the weights ( $W_i$ ) of all users.

17. (New) The method of claim 16, wherein the step of calculating the scheduling number as a function of earlier scheduling numbers ( $S_i$ ) and the weights ( $W_i$ ) of all users includes the steps of:

calculating the starting scheduling number for a user entering the scheduling process once it has started using the equation,  $W_i \sum S_i / ((\sum W_i) - W_i)$ , if the equation yields a value greater than 1; and

assigning a scheduling number with a starting value of 1 to the user entering the scheduling process once it has started, if the equation yields a value that is not greater than 1.

18. (New) The method of claim 3, wherein the step of scheduling radio resources for the user includes scheduling transmission of a radio block for the user if the ratio  $W_i/S_i$  for the user is larger than the ratio for any other user.

19. (New) The system of claim 9 further comprising:  
means for calculating a ratio ( $W_i/S_i$ ) between the weight and the scheduling number for each user; and  
means for scheduling transmission of a radio block for a given user if the ratio  $W_i/S_i$  for the given user is larger than the ratio for any other user.